**Criterion E – Processing Data**

Table below shows the descriptors and indicators for Criterion E – Processing Data

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| **Level** | **Descriptor** |  | **Indicator** |
| 0 | The student does not reach a standard described by any of the descriptors below. |  | The student does not reach a standard described by any of the indicators below. |
| 1 - 2 | The student **collects some** data and **attempts to record** it in a suitable format.  The student **organizes and presents** data using **simple** numerical **or** visual forms.  The student **attempts to identify** a trend, pattern or relationship in the data.  The student attempts to draw a conclusion but this is **not consistent with** the interpretation of the data. |  | Data is recorded as sentences and not in a table.  *e.g. worms moved 3cm when….* |
|  | Observation has been recorded but it is not understandable or relevant to the aim. |
|  | At least one trend, pattern or relationship from the data is identified but is incorrect. |
|  | Attempts to draw a conclusion but this is not relevant to the data collected. |
| 3 - 4 | The student collects **sufficient** relevant data and **records** it in a suitable format.  The student organizes, **transforms** and presents data in numerical and/or visual forms, **with a few errors or omissions***.*  The student **states** a trend, pattern or relationship shown in the data.  The student draws **a conclusion consistent with** the interpretation of the data. |  | At least 3 data points (dependent variable) are collected |
|  | Data is recorded in an **appropriate** table.  *By appropriate, I mean it has rows and columns* |
|  | Table has understandable headings but one of heading is wrongly written. |
|  | Graph drawn fills almost half a page.  *So I don’t have to strain my eyes to assess your graph* |
|  | At least one of the axes (either x or y axis) has been correctly labeled. |
|  | Attempt to title the drawn table and the graph.  *e.g. The table/graph below shows…..* |
|  | Trend, pattern or relationship from the observation, table or graph are **correctly** stated  *e.g.* *When p increases, d increases/decreases* |
|  | Conclusion drawn is consistent with the stated trend, pattern and relationship.  *e.g. my results showed that the worm is afraid/moved away/moved into/… when….* |
| 5 - 6 | The student collects sufficient relevant data and records it in a suitable format.  The student organizes, transforms and presents data in numerical and/or visual forms **logically** and **correctly**.  The student **describes** a trend, pattern or relationship in the data  The student draws a **clear** conclusion **based on** the **correct interpretation** of the data and **explains it** using scientific reasoning. |  | At least 3 data points (dependent variable) are collected |
|  | Data is **clearly** recorded in an **appropriate** table.  *By appropriate, I mean it has rows and columns* |
|  | Headings in the table are **clearly** written, relevant to the data collected and has units of measurement correctly identified  *e.g. distance – cm, time – second or s* |
|  | Graph drawn fills almost half a page (so I don’t have to strain my eyes to assess your graph) **and** is appropriately spaced out ( I mean the gap between bars or data points ) |
|  | Both x and y-axes have been **correctly** labeled. |
|  | Table and the graph are correctly and clearly labeled  *E.g. The table/graph below shows…..* |
|  | Trend, pattern or relationship from the observation, table or graph are correctly described  *e.g. when p (x axis) increases, d (y axis) increases/decreases exponentially/greatly/gradually/erratically* |
|  | Conclusion drawn is consistent with the described trend, pattern and relationship.  *e.g. my results showed that the worm is afraid/moved away/moved into/… when….* |
|  | Conclusion drawn is supported by logical and clearly written scientific explanation, concepts or reasoning.  *Suggested relevant concepts – adaptation, habitat, predator-prey relationship, humidity, heat*  *e.g. this is because the worm was…/the worm is a…. and therefore…* |